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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,499	03/25/2004	Hidekazu Miyairi	0756-7275	5721
31780	7590	02/19/2009	EXAMINER	
ERIC ROBINSON			WEST, JEFFREY R	
PMB 955			ART UNIT	
21010 SOUTHBANK ST.			PAPER NUMBER	
POTOMAC FALLS, VA 20165			2857	
			MAIL DATE	
			DELIVERY MODE	
			02/19/2009	
			PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Advisory Action**  
**Before the Filing of an Appeal Brief**

**Application No.**

10/808,499

**Applicant(s)**

MIYAIRI ET AL.

**Examiner**

Jeffrey R. West

**Art Unit**

2857

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 23 January 2009 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 5 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  
Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: \_\_\_\_\_.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☐ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: \_\_\_\_\_.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_.  
13. ☐ Other: \_\_\_\_\_.

/Jeffrey R. West/  
Primary Examiner, Art Unit 2857

The proposed amendment to independent claims 1, 3, 26, and 28 changing "comparing a variance" to ---comparing a fluctuation--- and specifying that the reference value "is determined for a demanded performance of the semiconductor element" are considered to be new issues that would require additional search and/or consideration.

Applicant argues, "The Official Action sets forth an unreasonably narrow interpretation of the term 'variance' and, based on this interpretation, rejects the claims under § 112, first paragraph...The meaning of the term "variance" need not necessarily be limited to the statistical definitions provided by the Examiner. In addition to the specific meanings noted above, the Applicant respectfully submits that it is equally (if not more) well known that the term 'variance' means, more generally, 'the fact, quality, or state of being variable or variant' and is not limited to a specific statistical meaning as asserted in the Official Action. Also, the present specification uses a term that is similar to 'variation,' i.e. 'fluctuation' and its variants, to disclose the concept of the present invention."

The Examiner asserts that the claims as filed March 19, 2007, required "testing the crystallinity of the semiconductor film, of which the crystallinity is improved, using a fluctuation obtained from relations between the approximate line and the average values." This limitation was then rejected by a combination of Tsumura et al. in view of Ozawa et al. and further in view of Tanaka et al. and others with Ozawa teaching obtaining an approximate line from relations between the positions in the Y direction and the average values of the luminance corresponding to the positions in the Y direction, and testing the device surface using a fluctuation obtained from relations between the approximate line and the average values of the luminance (column 8, lines 3-20), specifically:

In each of the rows corresponding to X coordinate positions "151," "152," . . . of the unit blocks arranged in Y direction, that is, in each of the row with peak values positioned therein on the image and the rows adjacent thereto, the luminances of unit blocks are added.

FIG. 4C represents added luminance values graphically with respect to each of the rows arranged in Y direction. In each of the rows of X coordinate positions "151," "152," "153," luminance values are added and then compared for each row. In the same figure, if a curved line connecting the added values is drawn, a peak position (a predicted peak position) of that curved line can be specified to be the position of the boundary line of the slider edge portion X0.

Alternatively, there may be adopted a method wherein, in each of the rows extending in Y direction, a mean luminance value in unit blocks (pixels) is determined to draw the curved line shown in FIG. 4C, and a peak value of the curved line is specified to be the position of the edge portion X0.

In a subsequent response filed October 29, 2007, Applicant amended "testing the crystallinity of the semiconductor film, of which the crystallinity is improved, using a fluctuation obtained from relations between the approximate line and the average values" to recite ---comparing a variance obtained from relations between the approximate line and the average values with a reference value to evaluate the crystallinity of the semiconductor film having the crystallinity that has been improved--- and argued that "Independent claims 1, 3, 26 and 28 have been amended to recite comparing a variance obtained from relations between an approximate line and average values with a reference value to evaluate crystallinity of a semiconductor film having the crystallinity that has been improved".

As such, in addition to the fact that one having ordinary skill in the art would recognize the specific meaning of variance to be the mathematical variance, as opposed to variation and/or fluctuation that has a broader definition, the Examiner asserts that the record makes it clear that a "variance" and a "fluctuation" are different since the claim was amended to change "fluctuation" to "variance" in response to a rejection using Ozawa's teach of obtaining a fluctuation.

The Examiner also asserts that since the claimed variance is being changed back to the previously claimed fluctuation, which was rejected by the teachings of Ozawa, that such an amendment requires, at very least, additional reconsideration of Ozawa with respect to the limitations as currently amended.

/JRW/